

On the presence of the rissoid gastropod *Alvania lamellata* Dautzenberg, 1889 on the top of the azorean Condor seamount (206 m depth)

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Abstract

This note reports the presence of the rissoid gastropod *Alvania lamellata* Dautzenberg, 1889 on the top of the Condor seamount (Azores) at 206 m depth. This allows reconsideration of the ecology of the species which lives in the deep circalittoral rather than in the bathyal zone.

Keywords: Rissoidae; *Alvania lamellata*; Azores; seamount; habitat

Présence du Rissoidae *Alvania lamellata* Dautzenberg, 1889 au sommet (206 m de profondeur) du mont Condor (Açores)

Résumé

Le Rissoidae *Alvania lamellata* Dautzenberg, 1889 a été identifié au sommet du mont Condor (Açores) par 206 m de profondeur. Cette découverte permet de préciser l'écologie de l'espèce qui vivrait non pas dans l'étage bathyal mais plutôt dans l'étage circalittoral du large.

Mots-clés : Rissoidae ; *Alvania lamellata* ; Açores ; mont sous-marin ; étage

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Alvania lamellata is a rissoid gastropod from the Azores that was described by Dautzenberg in 1889, based on two empty shells collected at 1300 m depth, offshore Pico island in 1887.

We believe that no record of the species have been reported for almost a century since Bouchet & Waren (1993), in their revision of the Northeast Atlantic deep sea gastropods, only mention Dautzenberg shells for *A. lamellata*.

However, Hoenselaar & Goud (1998) report the species in their faunistic list from the Cancap cruises that occurred in 1981 : *A. lamellata* was at this occasion sampled at four stations from the Azores, at depth ranging from 240 to 620 meters.

More recently, a dozen of empty shells of *A. lamellata* (figure 1) were identified from the summit of the Condor seamount (Azores) at only 206 m depth. The benthic samples were taken on board the R.V. Noruega in July 2010, using an interface multicorer (core diameter 100 mm). The Condor seamount is flat at the summit where the benthic habitat is very heterogeneous and characterized by the presence of large rocky outcrops, boulders, gravels, and coarse bioclastic deposits (Zeppilli *et al.*, 2013). Benthic samples taken during the same cruise from the steep slopes of the seamount (mainly characterized by unconsolidated sediments) did not exhibit any *Alvania lamellata* shells.

These recent records thus allow to reconsider the depth range of *A. lamellata* which was previously believed to be a deep bathyal species while it would rather live in the deeper part of the circalittoral.

In addition, the fact that the species was sampled in an environment dominated by rocks and boulders and that all specimens found in coarse sediments were only empty shells (although fresh) suggest that the species, like most Rissoidae, inhabits rocky substrata. Only the use of sampling gears suitable for small epifauna present on rock or on/under boulders at high depths, such as ROV, would allow the catch of live specimen of *A. lamellata*. Such specimen would be very useful to better describe the taxonomy of this beautiful although yet poorly known species.



Figure 1: Specimen of *Alvania lamellata* Dautzenberg, 1889 from the summit of the Condor seamount (Azores).

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